

REMARKS

Applicant thanks the examiner for the opportunity to discuss the office action during an interview on October 6, 2005. The interview attendees were Madeleine AV Nguyen, Barbara Benoit, and Priya Viswanath.

Interview Summary

The '961 Patent

The applicant and examiner discussed the examiner's reading of the Balonon-Rosen '961 patent (U.S. Patent No. 6,307,961) and how the examiner applied this reference to claims 8 and 22.

The claim language at issue in claim 8 is "means for transforming data from the source device color space to an intermediary color space . . . using . . . a source rendering intent."

The examiner pointed to the portions of the '961 patent she believed to show such a use of a source rendering intent. In the '961 patent, "[t]he user renders an image on a source device and then processes that image through the CMS and renders it on the destination device." col. 5, lines 49-51. Then, "measurements or onscreen identifications are made of the respective error regions within the two rendered images and the user is enabled to indicate preferred color matching results." col. 5, lines 15-18.

In one example, "the mapping between source device digits and device-independent colors will be referred to as Mapping 1 and the mapping between device independent colors and destination digit values will be referred to as Mapping 2." col. 8, lines 18-22. "In this embodiment, the user has measured with a calorimeter a spot on the source rendered image." col. 8, lines 26-27. "The user specifies through an interface that [another color] is a preferable result from the CMS and that all transformations from [a set of colors from the source color space] which through Mapping 1 are associated with [a set of values in the device-independent color space] should get similar treatment." col. 8, lines 34-38. The examiner states that these lines disclose the use of a source rendering intent in transforming data from a source device color space to an intermediary color space, the device-independent color space.

The examiner stated that because the claim did not specify how the source rendering intent was used in transforming data to the intermediary color space, she had to read it broadly to include this use, namely, displaying the input image on the source device. She stated that if there were some language included that prevented the use from being a display of the data on the source device, then the '961 patent would not apply. In response, applicant argued that the claim language required the use of a source rendering intent in transforming, which could not be satisfied by merely using the rendering intent to display the input image on the source device.

Similarly, the claim language at issue in claim 22 is "transforming data from the source device color space to the destination device color space using . . . a source rendering intent." The examiner stated that the same rationale applied to rejection of claim 22.

The '944 Patent

The applicant and examiner also discussed the examiner's reading of the Ohta '944 patent (U.S. Patent No. 6,124,944) and how the examiner applied this reference to claim 21.

The claim language at issue in claim 21 is "zero the color components."

The applicant pointed to the portions of the specification explaining that zeroing the color components signifies changing all color values so that only grayscale (white, black, and shades of gray) colors remained.

The examiner referred to Figure 4 of Ohta in which an XYZ color value is input and a zero is output if the color is reproducible by the output device and a non-zero value is output if the color is not reproducible by the output device. The examiner stated that without further claim language explaining what "zero the color components" comprises, it must be read broadly to include outputting zero as disclosed by Ohta. She invited claim language explaining that to zero the color components means removing the non grayscale colors. She also invited dependent claims explaining how this step would be performed in the exemplary CIELAB and CIEXYZ intermediary color spaces.

Response to Office Action dated July 12, 2005

Claims 1-23 were pending as of the office action dated July 12, 2005. Claims 1, 8 and 15, 22, and 23 are independent claims. Based on an understanding of examiner's rejections gained during the interview, the independent claims have been amended for clarity without changing the scope of the claims. A Request for Continued Examination is also being filed with this amendment. No new matter has been added. The applicant respectfully traverses the rejections made in the final office action mailed July 12, 2005.

Section 103 Rejections Under U.S. Patent No. 6,307,961

Claim 1-6, 8-13, 15-20, and 22-23 stood rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,307,961 to Balonon-Rosen et al. ("Balonon-Rosen"). Claim 8 includes a means for "transforming data from the source device color space to an intermediary color space . . . using . . . a source rendering intent." The applicant respectfully traverses the rejection because claim 1 and the other independent claims include elements not disclosed or suggested by Balonon-Rosen.

Independent claims 1, 8, 15, 22, and 23. The Examiner asserts that Balonon-Rosen discloses using a source rendering intent in transforming data from the source device color space to an intermediary color space. (Figs. 1-2; Abstract; col. 1, line 67 – col. 3, line 8; col. 4, line 65 – col. 5, line 21; col. 8, line 7-col. 8, line 45). The applicant respectfully disagrees.

The portions cited by examiner merely discuss rendering an input image on the source device. Even if this rendering is done using a rendering intent, applicant submits that this is not use of the source rendering intent in transforming data from a source device color space to a destination device color space as one with knowledge in the art would understand the claim. It is well known to those in the art that rendering intents determine a type of mapping to be used to map colors from the gamut of one color space to the gamut of another color space. In transforming from one color space (the source color space) to another color space (the intermediary color space), claim 8 therefore calls for the use of the source rendering intent in determining a method to map colors between the two color spaces. Claim 8 has thus been amended to include this clarification. Method claim 1 and computer program product claim 15

have been similarly amended. Claims 22, 23, and newly added claim 24, which do not require an intermediary color space are similarly amended for clarification.

With this amendment clarifying that the source rendering intent is not used merely to display the input image on the source device, applicant respectfully asserts that claims 1, 8, 15, and 22-24 are in condition for allowance. As claims 2-7, 9-14, 16-21, and newly added claims 25-30 are dependent on allowable claims 1, 8, and 15, applicant submits that these claims are also in condition for allowance.

Section 103 Rejections of Claims 14, 7, and 21

Claim 14, 7, and 21 stood rejected under 35 U.S.C. § 103(a) as being unpatentable over Balonon-Rosen in view of U.S. Patent No. 6,124,944 to Ohta ("Ohta"). The applicant respectfully traverses the rejection because claim 14, 7, and 21 include elements not disclosed or suggested by Balonon-Rosen or Ohta.

Claim 14 includes a means for "zeroing the color components of the intermediary data before transforming the intermediary data." The examiner states that Ohta discloses this limitation. Ohta discloses a "color-reproduction possible/impossible decision unit," 5:64-65, which outputs "zero" if "the image data that has entered from the input device is within the color-reproduction range of the output device," and outputs "non-zero" if "the image data that has entered from the input device is outside the color-reproduction range of the output device." 7:37-42; see also Figure 4.

As discussed in the interview with the examiner and in the specification, the language "zeroing the color components" in the claim refers to modifying the color components of the intermediary data such that only grayscale colors remain. Claims 14, 7, and 21 have been amended to provide this clarification. In addition, dependent claims 25-30 have been added to clarify the process of modifying the color components when the intermediary color space is the CIELAB color space or the CIEXYZ color space. With these clarifications, applicant respectfully asserts that claims 7, 14, 21, and 25-30 are in condition for allowance.

Applicant : Peter S. MacLeod
Serial No. : 09/653,052
Filed : September 1, 2000
Page : 13 of 13

Attorney's Docket No.: 07844-356001 / P331

Please apply the \$790 fee for Request for Continued Examination and the \$350 fee for excess claims and any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: Oct. 12, 2005

Barbara A Benoit for Barbara A Benoit
Hans Troesch Reg. No. 54,777

Hans Troesch
Reg. No. 36,950

Customer No.: 021876
Fish & Richardson P.C.
1425 K Street, N.W.
11th Floor
Washington, DC 20005-3500
Telephone: (202) 783-5070
Facsimile: (202) 783-2331

40305606.doc